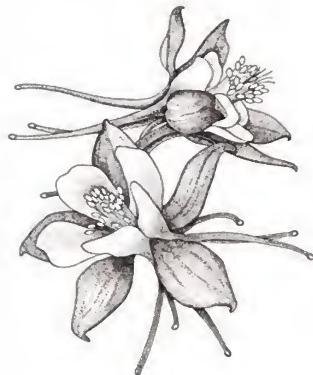


Aquilegia

Newsletter of the Colorado Native Plant Society

Dedicated to furthering the knowledge, appreciation and conservation of native plants and habitats of Colorado through education, stewardship and advocacy



Volume 35 – Number 3 – Fall 2011

ISSN 2162-0865 (print) ISSN 2161-7317 (online)

CONSERVATION CORNER

By Mo Ewing

A few weeks ago I volunteered to be the chairman of the CoNPS conservation committee. One of the responsibilities of the job is to write, or have someone write, pieces for this column. But since time was too short to organize that, I thought I might use the space this month for some introductory observations and a call for interested people to come and join me in conservation issues.

But before I get into the meat of the issue, I would like to do what Ann Henson used to do when she was president of CoNPS. Before the actual work started we would share native plant stories, just for fun. Presently I am sitting at my computer while on the island of Nantucket, Massachusetts. I am always fascinated by the plants and plant communities that are found in disparate places, and Nantucket and Colorado are about as different as can be. In fact, according to NatureServe, there is only one plant association that is common to both, “Duckweed species Permanently Flooded Herbaceous Vegetation”. I have not found this association in either place yet, but I haven’t looked hard either.

However, one of my favorite places here is Sanford Farm, which has an excellent example of Sand Plain Grasslands. Nantucket is nothing more than a pile of sand, the terminal moraine left by the glaciers 10,000 years ago. Here little bluestem (*Schizachyrium scopo-*

rium) grows in almost pure stands. Little bluestem also grows all over Colorado from the Pawnee and Comanche Grasslands to the Colorado Tallgrass Prairie in Boulder and even in places on the West Slope.



Nantucket Little Bluestem Grasslands

Photo by Mo Ewing

Another interesting grass grows in both places. Salt-marsh switchgrass (*Panicum virgatum*) grows on Sanford Farm along a sandy road about a quarter-mile from a salt marsh, but it is also a co-dominant in the Colorado Tallgrass Prairie in Boulder. Talk about a wide ecological range!

According to L. J. Mehrhoff¹ these two grasses probably migrated east from the mid-western prairie during a particularly warm period called the hypsithermal or xerothermic period 8,500 to 5,000 years ago. He postulates that the prairie peninsula, a finger of the tallgrass prairie that currently extends into Ohio, expanded eastward into New England and then when things cooled off and favored tree- rather than grass-growth, our species were stranded in small grasslands along the coast. A species of blazing star (*Liatris scariosa* var. *novae-angliae*) also was stranded here, but unlike the grasses, became a separate species, now globally rare. You can catch some of our *Liatris*'s blooming along the Front Range into October.

You might expect wind-pollinated grasses to be found in both states, but how do you explain Kinnikinnik (*Arcostaphylos uva-ursi*)? It grows in large patches on Sanford Farm, but you also find it on the Lyons Overlook Trail in Roxborough State Park in a rocky Ponderosa Pine forest). Unlike our mid-western prairie plants this plant probably came south from common populations in the arctic boreal regions. It is found not only in Massachusetts and Colorado, but also in northern regions of Europe and Asia.



Gentiana algida, Summit Lake, Mt. Evans
Photo by Mo Ewing

Back to business. Over the last few years, it seems to me that the conservation committee has not been very active. So I decided to dig a little deeper into the committee's past and found a document called, "Conservation Committee Objectives and Functions", adopted September 28, 2001. This document listed seven objectives and 16 functions for which the committee was responsible. Perhaps this document was the reason people were not lined up to volunteer for the committee chair.

I'll summarize:

Objectives

- Advocate for the conservation of endangered, threatened, sensitive and special concern species.
- Promote recognition and conservation of native plant communities in Colorado.
- Promote legislation, rules and regulations to protect sensitive, special concern, threatened and endangered Colorado native plants and plant communities.
- Oppose legislation, rules or regulations that will adversely affect native plants and plant communities.
- Discourage the use and spread of non-native species, especially noxious weeds that threaten Colorado's native flora.

Functions

- Identify and assist in field inventories of Colorado rare plants and plant communities. Represent the Society at Colorado Rare Plant Technical Committee meetings and assist in obtaining formal agency recognition or listing of species that qualify.
- Work to increase public and agency awareness of rare and endangered Colorado plants and plant communities.
- Exchange information about rare plants and plant communities with the Colorado Natural Heritage Program and the Colorado Natural Areas Program.
- Review status reports and other documents produced for Colorado's rare plants.
- Review and comment on local, state, and federal documents, rules, and legislation

- concerned with the land management and vegetation in Colorado.
- Provide reports as requested, to the Board of Directors and articles to *Aquilegia*.
 - Prepare and present testimony at appropriate hearings.
 - Continue efforts to get a Colorado Endangered Species Act passed by the state legislature.
 - Initiate efforts to get state legislation passed that affords legal protection to rare or endangered plant communities.
 - Provide information to encourage state and federal agencies to use locally native plants in their restoration/revegetation operations.
 - Support noxious weed control efforts.
 - Maintain a list of professional and lay persons familiar with the taxa, communities and areas of botanical interest in Colorado.

I might be able to accomplish these goals with a full-time staff of six, but lacking that, I'll settle for accomplishing things that our current membership is interested in doing. So, I am interested in your input. What conservation issues do you think our society should be doing? What conservation issues would you like to work on with me? What conservation items would you like to see in this column in *Aquilegia*? Would you like to write a column here? Can you suggest interesting people to write a column?

You can contact me at moewing@q.com or (303) 584-8925.

Lacking any feedback from anyone, I plan to forge ahead on my own on several fronts. First, I'll serve on the Colorado Rare Plant Technical Committee. I went to the committee's annual meeting in Carbondale the day before the CoNPS Annual Meeting. I am always struck by the number of new rare plant populations that are found each year; sometimes a new species or two are found. But almost all of the people there are professional botanists who work for the Forest Service, BLM, Denver Botanical Gardens and the like. There are probably fifty or maybe a hundred people like that who are members of CoNPS. That leaves about 550 of the rest of us who do other things or work on non-botanic jobs and do our plant thing as an avocation. I would like to do an article for *Aquilegia* that focuses on the rare plants and/or plant communities that us "amateur botanists" have found in the last year (or two). I have

always been impressed by the knowledge that our "non-professional" members have. Please send me your stories and photos.

Secondly, I'll continue to comment on conservation issues that come up, and would love assistance from anyone who would like to help. This summer we opposed Christo and Jeanne-Claude's "Over The River Project", an art construction along the Arkansas River, because of its potential negative impact to several species of rare plants there. We received a certain amount of criticism for that, but as a Native Plant Society I believe that we must advocate what is best for native plants, especially rare ones. There are plenty of other people who will advocate for tourism, economics, art or fame.

I am personally particularly interested in rare plant communities. Did you know that of the 1,054 plant associations recognized by NatureServe in Colorado, 76 are ranked as either G1 or G2 - imperiled or critically imperiled? There are probably no more than a handful of people in Colorado who could name a rare plant community, never mind find one.



Summit Lake, Mt. Evans

Photo by Mo Ewing

And finally while talking about rare plant communities, last summer Bill Weber wrote an article in *Aquilegia* asking our society to tackle the issue of the introduction of exotic mountain goats into Mt. Evans. I would like to take this issue on, and again, would love to pull together a small group of people to see how we could protect the rare plants and populations on that site. It is one of the gems of Colorado.

There are endless interesting and challenging conservation issues to study here in Colorado. I invite you to join me in what could be an exciting and educational experience. Please write, call or e-mail.

Mo Ewing
Conservation Chair

¹Mehrhoff, L. J. 1997. "Thoughts on the biogeography of grassland plants in New England". Pp. 15-24 in *Grasslands of northeastern North America; ecology and conservation of native and agricultural landscapes* (P.D. Vickery and P.W. Dunwiddie, eds.). Massachusetts Audubon Society.

In addition to becoming the new Chair of the Conservation Committee, Mo Ewing is Treasurer of CoNPS. He recently retired from Colorado Open Lands as its Land Stewardship Director and now volunteers for a variety of organizations including the Colorado Natural Areas Program and the Denver Natural Areas Program.



Liatris scariosa novae-angliae

Nantucket, MA

Photo by Mo Ewing

WORKSHOPS

Wild Pinks of Colorado

Date: Saturday, December 3, 2011 or
Sunday, December 4, 2011; 9am – 3pm
Presenter: Rich Scully
Where: CSU Extension Service, 9595 Nelson Road,
Longmont, CO 80501

PLEASE NOTE!

The workshop for December 3 is full, but there are still spaces available for the December 4 workshop.

The Caryophyllaceae family in Colorado includes an alpine cushion plant, native catchflies in the alpine down to the foothills, alien catchflies along roadsides, and invasive ornamentals. We will learn how to identify all of the genera and most of the species. Using pictures and material collected for hands-on dissection, we will become more familiar with the terminology and morphological characteristics used in keys. This is Rich's fifth workshop for CoNPS.

To register for this workshop through paypal, please go to <http://www.conps.org/Activities/workshops.shtml>.

To register through the mail, use the workshop registration form on the following page.

**COLORADO NATIVE PLANT SOCIETY
WORKSHOP REGISTRATION FORM**

2011-2012



NAME: _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE (h): _____ PHONE (w): _____

PHONE (cell): _____ EMAIL: _____

I am a member of CoNPS Yes No.
(If not, you must add the annual membership fee to your payment.)

Please register me for the following workshops at **\$25 per session**:

Workshop Title	Session Date	Fee \$ _____
Workshop Title	Session Date	Fee \$ _____
Workshop Title	Session Date	Fee \$ _____
Workshop Title	Session Date	Fee \$ _____

Total Registration Fees _____
Membership fee (if applicable) \$ _____

Total amount of check made payable to CoNPS \$ _____

To encourage carpooling, are you willing to share your contact information with others in the same workshop? _____
Yes _____ No _____

Mail Workshop Registration to:

CoNPS, Linda Smith, 4057 Cottonwood Dr., Loveland CO 80538

MEMBERSHIP FEES (circle one):

Please select an affiliate Chapter (all members may attend any chapter event):

Boulder Gore Range Metro/Denver
Northern Plateau SE SW Unaffiliated

Individual	\$20	Family	\$30
Senior	\$12	Student	\$12
Organization	\$30	Supporting	\$50
Lifetime	\$300		

REQUEST FOR PROPOSALS – THE JOHN W. MARR AND MYRNA P. STEINKAMP FUNDS

The Colorado Native Plant Society supports research projects in plant biology from the John W. Marr and Myrna P. Steinkamp funds. These separate funds honor the late Dr. John Marr, Professor at the University of Colorado and the first President of the CoNPS, and Myrna Steinkamp, a founding member of CoNPS who worked on behalf of the Society for many years in a variety of capacities. Both funds were established to support research on the biology and natural history of Colorado native plants by means of small grants. The Steinkamp Fund targets rare species and those of conservation concern. Both field and laboratory studies are eligible for funding. Thanks to the generous contributions of many members and supporters, a total of

nearly \$3,000 is available, although individual awards will not exceed \$1,000. Recipients of the awards must agree to summarize their studies for publication in *Aquilegia*.

The Board of Directors is now soliciting proposals for a February 15, 2012 deadline. Information on guidelines and requirements for proposals may be obtained at http://www.conps.org/research_grants.html.

If additional information is needed, contact the Chair of the Research Grants Committee, Catherine Kleier at ckleier@regis.edu.

BOOK REVIEWS

By Bob Henry

On February 18, 1852, Henry David Thoreau wrote in his journal: “I have a commonplace-book for facts and another for poetry, but I find it difficult always to preserve the vague distinction which I had in my mind...”

In different ways, the two books reviewed below – one newly-published and the other newly reissued in a second edition – reflect nature as both “fact” and “poetry”, to use Thoreau’s terminology.

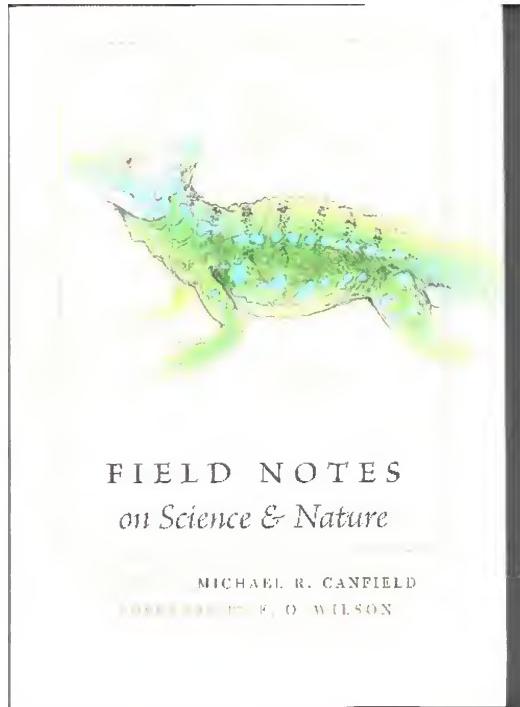
Although the essayists whose works comprise *Field Notes on Science and Nature* are first and foremost focused on fact-based observation, their work often reflects the “poetry” of nature in addition to the mere recording of “facts”. Similarly, Candace Savage’s *Prairie: A Natural History* captures the poetry of the prairie without ignoring underlying facts.

Field Notes on Science and Nature, Edited by Michael R. Canfield. Cambridge, Harvard University Press, 2011.

When I came across *Field Notes on Science and Nature* in the nature section of the bookstore, it immediately piqued my interest more because of my longtime interest in journals and notebooks (usually of historical rather than scientific interest). As I stood there skimming through it, I became immediately absorbed.

Field Notes on Science and Nature is a collection of twelve essays by field scientists, with an introduction that provides historical context. Both the introduction and the essays are well-illustrated with copies of pages from actual field notes. The illustrations include pages from as far back as Linnaeus, Darwin, and Meriwether Lewis. More recent examples include both handwritten and hand-sketched field notes, as well as others kept digitally with computers, digital photography, digital sound recordings,

and other modern technological tools. For the latter, see particularly “Note-Taking for Pencilophobes”, by Piotr Naskrecki.



The essays share the general topic of observing nature and recording those observations. Their scope is broad, representing geologists, archaeologists, zoologists, and more. As a result, the book has a wide appeal to anyone interested in the observation of the details of nature, regardless of whether they have scientific backgrounds or are simply interested in observing more closely the nature around them.

The dust jacket notes that the book “allows readers to peer over the shoulders and into the notebooks of a dozen eminent field workers, to study firsthand their observational methods, materials, and fleeting impressions.”

It is not intended as a history of field notes, nor is it a how-to book. Nonetheless, readers will find fascinating historical tidbits (especially in the Introduction) as well as some practical tips along the way as to what has worked well (or not) for the essayists.

In “The Evolution and Fate of Botanical Field Books”, James L. Reveal recalls the various means he has used over a forty-five year career of recording botanical information. In part, it is a lament that modern methods may reduce the amount of retained historical detail, as well as losing the individuality or personality of the person keeping the record. While it is easy to take the other side of that argument, is undoubtedly true that the digitized records being kept today will be markedly different than the hand-penned notes of the past, including their marginal notes, musings, and the inclusion of diary-like notes that may or may not be particularly relevant to the scientific inquiry at hand.

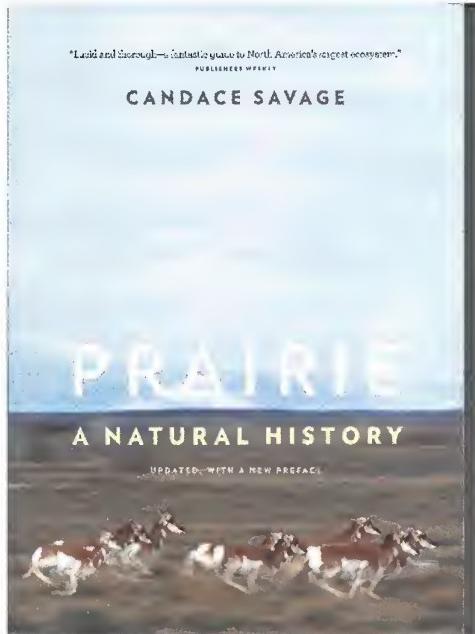
The book contains a number of sketches and drawings from various field notes – more than enough to make mere mortals envy the artistic ability as well as the scientific bent of the various people who made the notes and wrote the essays.

After spending the greater part of a rainy day in 1842 perusing old books and accumulated discarded possessions stored in the attic of the “the old manse”, Nathaniel Hawthorne observed that “Nothing, strange to say, retained any sap except what had been written for the passing day and year without the remotest pretension or idea of permanence... a few old newspapers, and still older almanacs...”

So it is, I think, with exceptional journals and notebooks such as those kept by Emerson, Thoreau, Alcott, Hawthorne, and naturalists such as Audubon. Now, after reading this book, I suspect the same might be said of naturalists’ field books. Though their contents might be sifted, sorted, added to or subtracted from in the final book or paper to which they contribute, it is often the field books that retain the immediacy and the context of times and places when new things were discovered or observed.

I found *Field Notes on Science and Nature* to be an extremely absorbing book, and I would expect that most readers – regardless of their background or their experience in keeping field notes themselves, will also find it so.

Prairie: A Natural History, Second Edition, by Candace Savage. Vancouver, D&M Publishing, 2011.



Originally published in 2004, *Prairie: A Natural History* is an extremely well-written and organized treatment of both the science and the beauty of the prairie. Intended for a non-technical audience, the book will nonetheless be of interest to all readers.

The book covers the 1.4 million acres of prairie that makes up the mid-section of North America, from the grasslands that comprise the greatest part of the prairie to prairie woodlands that make up the whole area's eastern boundary.

The book is very readable, and is exceptionally illustrated with photographs (mainly by James R. Page), pen-and-ink illustrations (Joan A. Williams) and helpful maps of the extent of grassland coverage, precipitation, soil types, prairie types, and more.

The book focuses particularly on the ecology of the prairie, leading to an assessment of the current condition and future of the prairie as it faces challenges from farming and other uses that have already nearly obliterated some prairie forms (such as the tallgrass prairie

and the northwestern Palouse, now largely agricultural land).

Along the way, Savage sprinkles poetry, such as the following by Carl Sandburg:

“I am grass,
Let me work.”

More than anything else, *Prairie* is simply an “appreciation” of a huge part of the continent that is often overlooked or under-valued.

If you missed the first edition (which became difficult to find some time ago), this is your second chance to enjoy a book that does not miss the forest for the trees, or the grassland for the grass.

Bob Henry's interest in nature began in the woods of western Pennsylvania. He also has an interest in nineteenth century history and journaling, and especially the life and writings of Henry David Thoreau. He is a Volunteer Master Naturalist with the City of Fort Collins Natural Areas Program, and editor of Aquilegia. He is retired from the Federal government after 32 years with the Executive Office of the President (OMB) and Department of the Interior (Bureau of Mines and the Bureau of Land Management).

NEWSLETTER AVAILABLE BY E-MAIL

Aquilegia is available electronically.

If you receive your newsletter by e-mail, this would save both postage and printing costs and you will receive each issue sooner.

CHAPTER NEWS and ANNOUNCEMENTS

BOULDER CHAPTER

Boulder Chapter programs are held on the second Thursday of each month (September through April) from 6:30 p.m. to 8:30 p.m. All meetings, except as noted, are held at the Community Room at the Boulder REI Store at 1789 28th Street (between Canyon and Pearl). For more information, please e-mail Chapter President Pamela Sherman at boulderconps@gmail.com

THE SEARCH CONTINUES FOR THE NEXT BOULDER CONPS PRESIDENT!

If you would like to consider joining our wonderful volunteer staff to help this flourishing chapter stay vibrant, please contact us for more information at:

boulderconps@gmail.com

PLANTS IN ARAPAHO TRADITIONAL CULTURE

Thursday, December 8, 2011, 6:30 pm

Presenter: Andrew Cowell, PhD., Professor of Linguistics at CU

Specialty: Native American Languages and Linguistic Anthropology including Ethnobotany and Ethnozoology

Dr. Cowell's talk will explore the names and uses of Colorado native plants in Arapaho culture. His presentation is based on field research with Arapaho Indians in Colorado and Wyoming, plus research with older manuscript materials in archives.

WHITE PINE BLISTER RUST IN HIGH MOUNTAIN ECOSYSTEMS

Thursday, January 5, 2012, 6:30 pm

Presenter: Anna W. Schoettle, PhD, Research Plant

Ecophysiologist at the Rocky Mountain Research Station

Dr. Schoettle will provide an overview of the ecology of our remarkable limber pine and the Rocky Mountain bristlecone pine, and the factors that threaten them. Both species are currently threatened by a non-native pathogen (that causes the lethal disease white pine blister rust), mountain pine beetle, and climate change. She will describe how these factors interact in high mountain ecosystems and the program currently underway to proactively increase the resiliency and sustainability of limber pine and Rocky Mountain bristlecone pine populations, and the ecosystems of the Southern Rockies.

FUTURE PROGRAMS (DETAILS TO FOLLOW)

February 9: Paula J. Fornwalt PhD, Research Ecologist with the USDA Forest Service, Rocky Mountain Research Station will speak on her recent native plant research.

March 8: Sylvia Hickenlooper, Soil Scientist with NRCS will present.

GORE RANGE CHAPTER

This new chapter of the Colorado Native Plant Society is being formed. We hope to have program and other information available on the website soon and in future issues of *Aquilegia*.

METRO-DENVER CHAPTER

Monthly meetings of the Metro-Denver Chapter are typically held on the fourth Tuesday of the month (September through April) at the Denver Botanic Gardens, 1007 York Street, Denver. The Metro-Denver Chapter welcomes everyone, members and non-members, to attend its free programs and field trips. For more information, please contact Jannette Wesley at [metrodenverconps@gmail.com](mailto.metrodenverconps@gmail.com).

COLORADO AND PATAGONIA - WHAT DO THEY HAVE IN COMMON?

November 29, 2011

Presenter: Mike Kintgen

“Argentine Patagonia and Colorado share much in common, similar climates, both steppe and temperate mountains create similar vegetation patterns. This past winter I was able to spend 5 weeks in Argentine Patagonia with my colleague Dan Johnson. We covered many miles studying the flora.

Not only do Patagonia’s landscapes resemble the Mountain West, but many plant families, genera and even a few species are the same. We’ll take a look at both locations and compare and contrast their flora. There should be some surprises and nice landscape and flora shots.”

TO BE ANNOUNCED

January 24, 2012

RARE PLANT STEWARDSHIP: DOCUMENTING AND PROTECTING COLORADO'S RAREST PLANTS

February 28, 2012

Presenters: Jenny Neale and Brian Kurzel

Join Jenny Neale, Director of Research & Conservation at Denver Botanic Gardens, and Brian Kurzel, Natural Areas Coordinator at the Colorado Natural Areas Program to learn how you can help protect Colorado's rarest plants. Jenny and Brian will discuss the Rare Plant Monitoring Steward program, a volunteer program designed to get citizen scientists into the field collecting data. In the first five years of the program, more than 70 people have been trained in the theory and practice of rare plant conservation. Learn how the RPM Stewards are positively impacting rare plant conservation within the state while also learning more about the research and conservation work done at Denver Botanic Gardens and the Colorado Natural Areas Program.

TO BE ANNOUNCED

March 27, 2012

Presenter: Panayoti Kelaidis

COLORADO WETLAND PLANT FIELD GUIDE

April 24, 2012

Presenter: Denise Culver

Tools for Colorado Wetlands: Essential Information for Identification, Assessment, and Conservation, will develop a Colorado Wetland Field Guide that will contain botanical descriptions of over 520 wetland plants as well as information on priority wildlife species and other wetland-dependent animals, wildlife and vegetation ecology, and rare and/or sensitive plants. The Guide will serve as the ultimate resource to determine a wetland plant's identity, wetland indicator status, coefficient of conservation, rarity, and ecology. The project will also develop an easily accessible Colorado Wetland Website that will present a) information on wetland ecosystems and their conservation status, b) a database to calculate the overall conservatism of species present in a wetland, c) reports on Colorado wetland and wetland assessment tools, and d) links to other wetland projects and programs—a virtual “one-stop shopping” for wetland information in Colorado.

NORTHERN COLORADO CHAPTER

MONTHLY MEETINGS NIGHTS HAVE CHANGED

The Northern Chapter meetings are the first Thursday of the month (unless stated otherwise), November through May, 7:00 pm, at The Gardens on Spring Creek, 2145 Centre Ave., Fort Collins, CO. For further information, contact Northern Chapter President, Jennifer Ackerfield, at jackerfield@gmail.com.

Meetings and field trips are free and open to all.

Prior to meetings, we meet for dinner with the speaker at Café Vino, 1200 S. College Avenue, Fort Collins at 5:30 p.m. Please join us.

NURTURING A SEED: DEVELOPING A THERAPEUTIC GARDEN

Wednesday, December 07, 2011, 7 p.m.

Presenter: Ms. Kim Ewy, Ph.D. Candidate, CSU

Kim spoke to us last year to tell us of her plans to develop a plan for a therapeutic garden at Poudre Valley Hospital. Since that time so much has happened. Kim has become a PhD student and also landed a significant grant to make her dream come true. This is a sequel to an amazing story with an amazing person to tell us about her adventure!

FRACTALS FROM THE FOREST

Thursday, January 05, 2012, 7 p.m.

Presenter: Renee Galeano-Popp, (Ret. USFS Regional Botanist, Consultant, CSU Herbarium Volunteer)

During 2010, Renee was trying to figure out her next botanical project when she started collecting pine cones from around the world using Facebook and the internet. With the help of individuals and gardens and arboreta in the US and Mexico, Project Pine Cone was quickly born. This hands-on educational display is intended to "keep botany alive in our culture" and already includes over half of the world's pine species and counting. Renee says that even with her education in Botany and Forestry, she still had many "wow" and "ahah" moments during the pursuit of pine information and is ready to share them. In January, she will bring the collection and talk about pine ecology, classification, and her experiences taking Project Pine Cone to the Poudre School District during the 2011-12 school year. This a good time to review our own knowledge and celebrate our local pines.

EDIBLE WILD PLANTS OF COLORADO: AN ARCHAEOLOGICAL PERSPECTIVE

Thursday, February 02, 2012, 7 p.m.

**Presenter: Meg Van Ness, Regional Historic Preservation Officer/Archaeologist,
US Fish & Wildlife Service**

With a little bit of knowledge and a good digging stick, resourceful Americans were able to find plenty to eat among the wild plants of Colorado. Whereas this virtual

cornucopia of seeds, berries and roots would never be mistaken for a Big Mac, it did provide a year-round supply of nutrients and calories to sustain the native populations for thousands of years. Some of these plants, such as wild plums and pinion nuts, require only a slight stretch of the modern imagination to be considered for tonight's dinner. Others, such as the slime covered cattail root, stinking gourds, nauseous rabbit-brush and the aptly named pincushion cactus, take a bit more thought.

Thankfully, the collection and preparation of these plants is often described in ethnographic accounts from the late 1800's and early 1900's. These accounts provide great reading and valuable analogies for the interpretation of plant remains from archaeological contexts.

Meg's 45-minute PowerPoint presentation will cover the excavation and extraction of botanical remains from archaeological sites, the interpretation of the remains and a review of some of the plants and their uses. Many of the plants discussed are common in our yards and open landscapes.

RESTORING NATURE

Thursday, March 01, 2012, 7 p.m.

Presenter: Jim Tolstrup, Executive Director High Plains Environmental Center

Join Jim Tolstrup on a virtual tour of the High Plains Environmental Center. Jim will share the strategies involved in designing, funding, building, vegetating and maintaining the center's extensive native plant gardens and restored natural areas, as well as the center's mission to educate the public about the propagation, conservation and use of native plants and the corresponding benefits to wildlife.



COLORADO WETLAND FIELD GUIDE

Thursday, April 05, 2012, 7 p.m.

Presenter: Denise Culver, Ecologist, Colorado Natural Heritage Program

Many of you have heard about the project to create a field guide for Colorado wetlands. It is our great pleasure to present the project leader and lead author, Denise Culver. Denise will give you a summary of her new guide and share her adventures as she embarked on this three-year odyssey to create a great tool for our state. Many of you know Denise, and if you don't and her name is familiar it is because she served as Northern Chapter President and the State Treasurer for CoNPS for a number of years!

KEEPING UP WITH TECHNOLOGY – USING ONLINE AND ELECTRONIC KEYS

Thursday, May 03, 2012, 7 p.m.

Presenter: Ernie Marx

Ernie Marx will facilitate as we come together for this workshop-style program. Ernie will have plants for us to key using some of the newest programs like XID for keying plants on your computer! These keys can be easier to use than typical dichotomous keys, especially if you don't have both fruits and flowers or all the parts. Once you become familiar with these keys they offer a totally different keying experience. You may bring in a plant if you like and we can investigate your plants too as time allows.



Soapstone Prairie Natural Area

Photo by Bob Henry

PLATEAU CHAPTER

The Plateau Chapter generally encompasses the west-central and north west area of Colorado from Grand Junction to Montrose to Gunnison to Glenwood Springs to Craig. Wherever you are in Western Colorado, come join us for meetings and field trips.

Chapter activities are scheduled throughout the year. For more information, visit www.CoNPS.org or contact Chapter President Gay Austin at austin-ceae@frontier.net.

SOUTHEAST CHAPTER

Activities of the Southeast Chapter are scheduled throughout the year and include field trips and meetings. Regular chapter meetings (always with an educational focus) will begin in October in both Pueblo and Colorado

Springs. Those wishing more information can e-mail us as SEtrips@gmail.com and we will add you to our distribution list.

The Southeast Chapter welcomes your participation, no matter where you are in southeast Colorado. Activities will be scheduled throughout the year with most meetings in Pueblo and field trips to a variety of sites throughout the area.

Southeast Chapter meetings are held from 6:30 p.m. to 8:00 p.m. All meetings, unless otherwise noted, will be held at the 701 Court Street in Pueblo.

For more meeting information, please call Warren Nolan: (719) 543-6196.

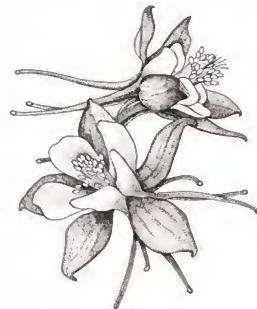
GRETCHEN VAN REYPER

We are sorry to have to note the loss of Gretchen Van Reyper, a longtime member of the Colorado Native Plant Society and highly regarded contributor to the nature of the West and particularly to native plants and habitats.



Gretchen received her B.S. in Environmental Biology from Mankato State University and pursued this career field throughout her life. After leaving Minnesota and a brief period in the Northeast, she headed west “looking for adventure” and landed on the Western Slope. She became a renowned, well-respected expert in plant identification, wetland studies, and soil restoration projects throughout Colorado and Utah. She was consulted regularly during the creation of the Montrose Botanic Gardens, was an active member of CoNPS, a freelancer for Biologic, the BLM, and most recently was employed by ERO Resources Corporation as an ecologist researcher.

Montrose Botanic Gardens, where Gretchen consulted, has been approached and agreed to assist in a “Gretchen Memorial Native Plant Garden” with a possible design of path to a garden filled with her favorite native plants. Diane Winger – diane@wingpeople.com – will be organizing and collecting donations if you wish to participate. Gretchen’s legacy will live on for all to enjoy and learn in this beautiful setting.



AQUILEGIA

Newsletter of the Colorado Native Plant Society

Aquilegia is the newsletter of the Colorado Native Plant Society, and is available to members of the Society and to others with an interest in native plants. Four regular issues are published each year, plus a special issue for the annual Society meeting held in September

Announcements, news, articles, book reviews, poems, botanical illustrations, and other contributions should be sent to the editor at bh.prairieink@gmail.com.

All contributions are subject to editing for brevity and consistency, with final approval of material changes by the author.

Articles from *Aquilegia* may be used by other native plant societies or non-profit groups, if fully cited to author and attributed to *Aquilegia*.

Deadlines

Submissions to *Aquilegia* are accepted throughout the year, although the usual deadlines for publication are:

- February 15 (Spring issue, published March 1)
- April 15 (Summer issue, published May 15)
- June 15 (Annual Meeting issue, published July 15)
- July 15 (Fall issue, published Aug. 15)
- October 15 (Winter issue, published November 15)

MEMBERSHIP APPLICATION AND RENEWAL FORM

Name(s)

Address

City State..... Zip

Phone - - - - - E-mail

CHAPTER You are free to affiliate with any chapter you choose and to attend the meetings of any chapter. Chapters do not have drawn map boundaries; the locations below indicate the usual meeting place of chapter meetings.

- Boulder Gore Range Metro-Denver
 Northern Plateau
 Southeast Southwest Unaffiliated

MEMBERSHIP CLASS

Dues cover a 12-month period.

- Individual (\$20.00)
 Family / dual (\$30.00)
 Senior (65+) (\$12.00)
 Student (\$12.00)
 Organization (\$30.00)
 Supporting (\$50.00)
 Lifetime (\$300.00)

OPTIONAL E-MAIL DELIVERY OF *Aquilegia*

Many members prefer to receive the newsletter electronically via e-mail, and this saves the Society considerable printing and postage expense. If you would like to receive the newsletter by e-mail, please check this box and provide your e-mail address above.

Please deliver *Aquilegia* electronically to the above e-mail address.

DONATION \$ _____ General Fund

Endowments in support of small grants-in-aid of research:

\$ _____ John Marr Fund: research on the biology and natural history of Colorado native plants.
\$ _____ Myrna P. Steinkamp Memorial Fund: research and other activities to benefit
the rare plants of Colorado

Mail to: Eric Lane, P.O. Box 200, Fort Collins, CO 80522

Please make checks payable to "Colorado Native Plant Society"

Dues and contributions are tax-deductible.

www.conps.org

Colorado Native Plant Society



The Colorado Native Plant Society is dedicated to furthering the knowledge, appreciation and conservation of native plants and habitats of Colorado through education, stewardship and advocacy.

Membership is open to all with an interest in our native plants and is composed of plant enthusiasts, both professional and non-professional.

Please join us in learning about, enjoying and protecting Colorado's native plants.

OFFICERS

President	Crystal Strouse	csnativeplants@gmail.com
Vice President	Bernadette Kuhn	bernadettekunhconps@gmail.com
Treasurer	Mo Ewing	moewing@q.com
Secretary	Nan Daniels	nahada@msn.com
Admin. Asst.	Linda Smith	conpsoffice@aol.com

CHAPTER PRESIDENTS

Boulder	Pam Sherman	boulderCoNPS@gmail.com
Northern	Jennifer Ackerfield	jackerfield@gmail.com
Metro-Denver	Jannette Wesley	metrodenverconps@gmail.com
Plateau	Gay Austin	austinaceae@frontier.net
Southeast	Ann Zielinski	zielinski.agnesann7@gmail.com

BOARD OF DIRECTORS

Director	Brian Kurzel ('13)	brian.kurzel@state.co.us
"	Jenny Neale ('13)	nealejr@gmail.com
"	Robert Powell ('11)	robertlpowell@durango.net
"	Jan Turner ('12)	jltturner@regis.edu
"	Charlie Turner ('11)	turner@ rabbitbrushpublishing.com
"	Steve Yarbrough ('11)	steveandkenna@msn.com

STANDING COMMITTEES

Conservation	Mo Ewing	moewing@q.com
Education and Outreach	Megan Bowes	bowesm@bouldercolorado.gov
Field Studies	Steve Popovich	stevepopovich@hotmail.com
Horticulture and Restoration	Megan Bowes	bowesm@bouldercolorado.gov
Media	Boyce Drummond	bdrummond3@msn.com
Membership	Eric Lane	ericmlane@yahoo.com
Research Grants	Jan Turner	jltturner@regis.edu
Sales	Linda Smith	conpsoffice@aol.com
Workshops	Steve Yarbrough	steveandkenna@msn.com
Editor, <i>Aquilegia</i>	Bob Henry	bh.prairieink@gmail.com
Webmaster	Yongli Zhou	shallopcc@yahoo.com
Website Editor	Linda Smith	conpsoffice@aol.com

“What pains are taken to keep this wilderness in health, - showers of snow, showers of rain, showers of dew, floods of light, floods of indivisible vapour, clouds, winds, all sorts of weather, interaction of plant on plant, and animal on animal, beyond thought! How fine Nature’s methods! how deeply with beauty overlaid! the ground covered with crystals, the crystals with mosses and lichens and low-spreading grasses and flowers, these with larger plants leaf over leaf with ever changing colour and form, the broad palms of the firs outspread over these, the azure dome over all like the bell-flower, and star above star.”

John Muir
My First Summer in the Sierra



P.O. Box 200
Fort Collins, Colorado 80522
<http://www.conps.org>



CALENDAR 2011 - 2012

NEXT BOARD MEETING

October, Regis University, Denver
(date to be announced)

WORKSHOPS

WILD PINKS OF COLORADO

Saturday, December 3
Sunday, December 4

BOULDER CHAPTER

Dec 8 Plants in Arapaho Traditional Culture
Jan 5 White Pine Blister Rust in High Mountain
Ecosystems

METRO-DENVER CHAPTER

Nov 29 Colorado and Patagonia – What Do They
Have in Common?

NORTHERN CHAPTER

Dec 7 Nurturing a Seed: Developing
a Therapeutic Garden
Jan 5 Fractals from the Forest